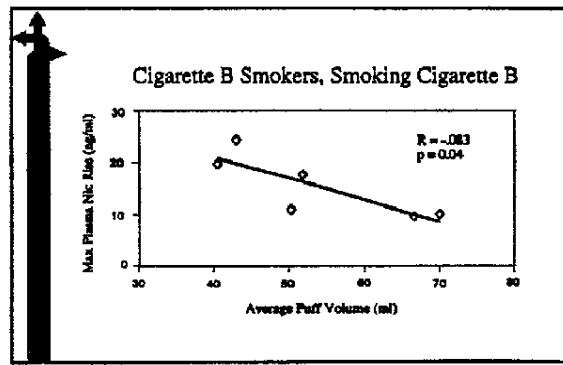
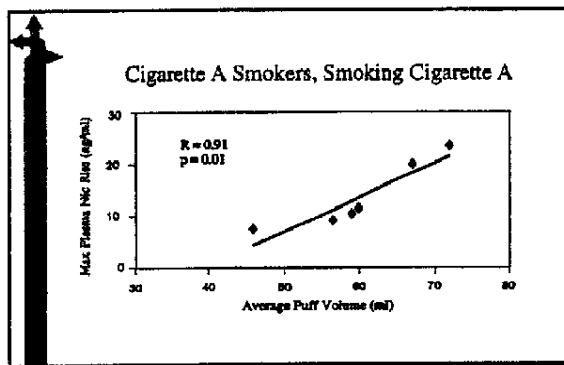


Human Smoking Behaviors
Inhalation & Smoke Component Absorption
Yield \neq Intake

Human Smoking Behaviors
Smoking is not simply puffing.
Absorption determined by
inhalation behavior.



Eclipse Studies
Application of These Techniques to Eclipse

Smoking Behavior Issues

- All data collected in laboratory sessions.
Laboratory vs Real-World?
- Short-term, switching studies.
Same results on smokers who
"naturally" choose Eclipse?

Human Smoking Behavior Studies

John H. Robinson, Ph.D.

R. J. Reynolds Tobacco Company

Psychophysiology Division

How People Smoke

How Smoking Behaviors Influence:

Smoke Yields
Smoke Components Absorbed
Sensory Attribute Measures
Acceptance

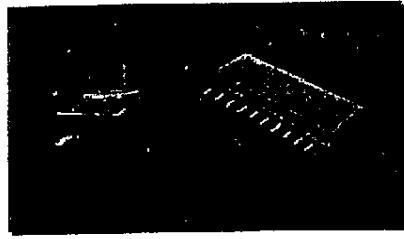
Puff Profile Instrumentation



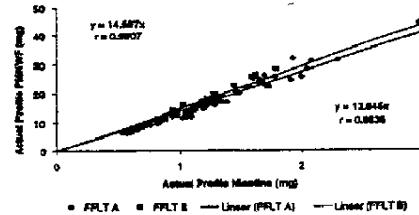
Subject Puff Profile

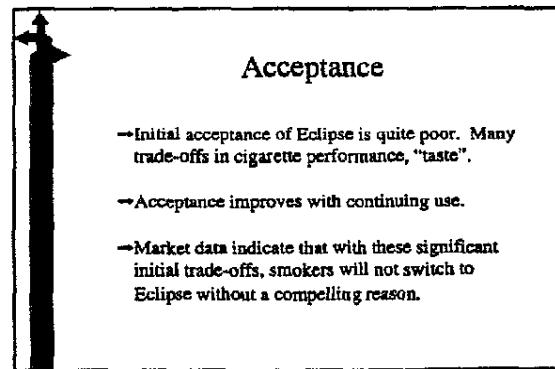
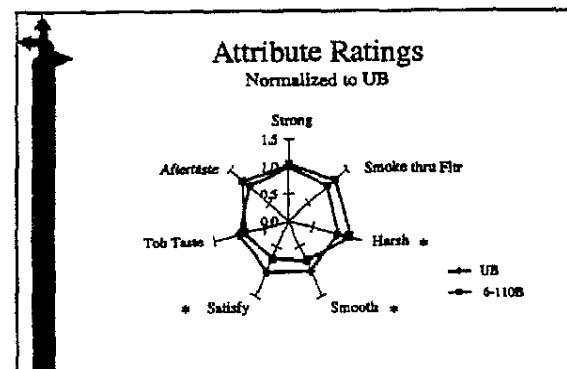
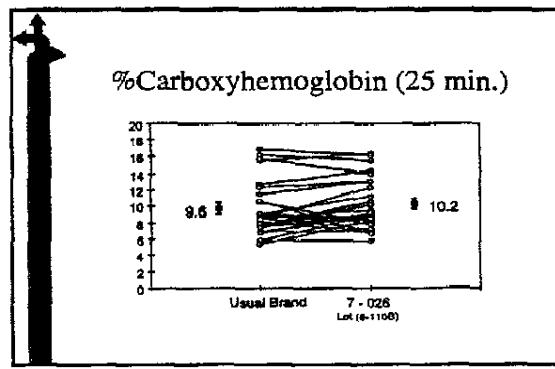
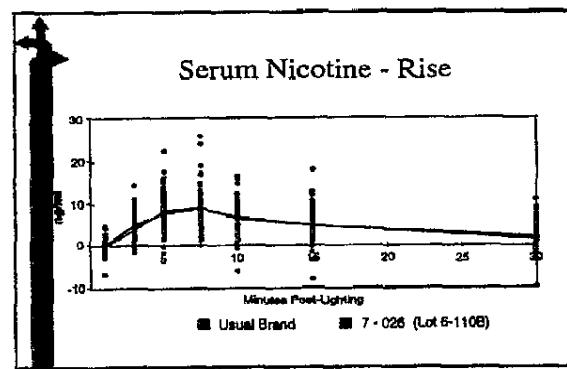
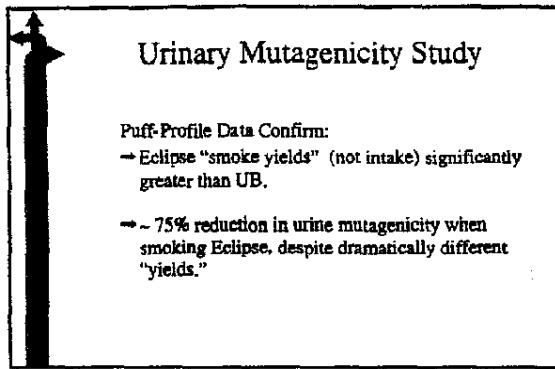
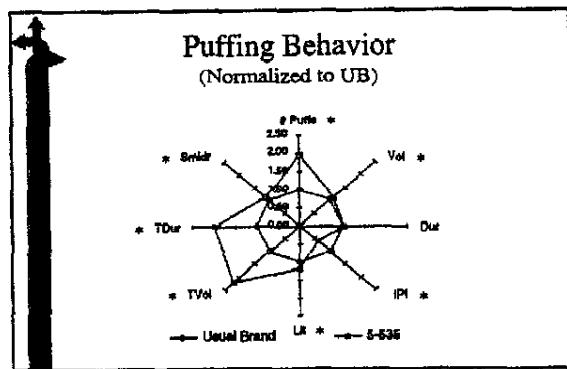


HMSM Instrumentation



PMNWF vs. Nicotine Actual





Smoking Behavior Study Endpoints

- Puffing Behavior
- Cigarette Attributes
- Serum Nicotine
- Blood %COHb

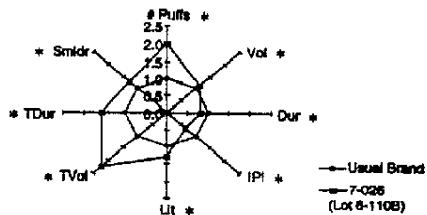
"Typical Switching-Study" Design

- Recruit (paid) volunteer smokers
- Tested smoking usual brand (afternoon)
- Smoke Eclipse exclusively for acclimation period, usually 2 weeks.
- Re-tested smoking Eclipse. Same day of week, same time of day.

Procedures

- *Ad lib* smoking before and after test sessions.
- Smoke one cigarette at test session.
- Questionnaire data collected post-smoking.
- Serum nicotine samples collected at -2, 0, 1, 3, 5, 7.5, 10, 15, and 30 min. post-lighting.
- %COHb samples collected at 0, and 25 min. post-lighting.

Puffing Behavior (Normalized to UB)



Puffing Behavior (Group Means)

Usual Brand 7-026 ¹	
* No. of Puffs	12.9
* Puff Volume (ml.)	52.4
* Puff Duration (sec.)	1.96
* Inter-Puff Interval (sec.)	27.7
* Time Lit (sec.)	331
* Total Puff Volume (ml.)	650
* Total Puff Duration (sec.)	24.9
* Smolder Time (sec.)	306

¹ Lot 6-110B

Urinary Mutagenicity Study

